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EXAMINER	
CHEN, YUAN L	

ART UNIT	PAPER NUMBER
2854	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/561,748	GYGI, MATTHIAS	
	Examiner	Art Unit	
	Yuan L. Chen	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) *10 and 17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,11-16,18-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 - 26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claims 9, 14, 24 and 26 are objected to because of the following informalities:

i) "said sheet" in line 1 of Claim 9 is unclear which sheet is referring to because previously in Claim 8 applicant has recited both "a substrate in the form of a sheet" in line 1 - 2 and "a sheet of non-magnetic material" in lines 6 - 7, and it appears that the applicant intended to recite –said sheet of non magnetic material—, which has been treated as such for the remainder of this Office Action;

ii) "said sheet" in lines 1 - 2 of Claims 24 and 26 is unclear for the same reason above;

iii) "an ink with varying optical effect" in lines 2 and 4 – 5 of Claim 14 appears to be a double recitation of which has already been recited in line 2 of Claim 11, and it appears that applicant intended to recite –the ink with varying optical effect--, which has been treated as such for the remainder of this Office Action.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 6 - 7, 11 - 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber (Patent No.: 3592132) in view of Batzar et al. (Patent No.: 6103361).

With respect to Claim 1, Weber discloses in Figs. 2 - 3 and column 4 lines 19 – 35: a printing machine for printing a substrate (33) in the form of a sheet or continuous web, said substrate (33) being intended to receive at least one impression, comprising at least one transfer system (35) for conveying (arrows) the substrate (33) onto an impression cylinder (38), at least one screen (1) of cylindrical or flat shape equipped with a doctor blade (31), the screen (1) collaborating with the impression cylinder (38) and intended to print the substrate (33) by screen-printing with an ink (11) and an unloading system (right 35) for carrying the substrate (33) away after the printing operation, wherein said impression cylinder (38) comprises at least one magnetic element (40) on its printing surface, said magnetic element (40) being placed at a location corresponding to said impression on said substrate (33) performed by said screen (1).

Weber does not teach that an ink containing pigments is optically variable and can be orientated by a magnetic field and so as to create a varying optical effect in said impression.

However Batzar et al. teach in Fig. 4 as well as in Abstract and in column 5 lines 13 - 33: the ink (8) is optically variable and the pigments (10) in the ink (8) can be orientated (10 to 10') by a magnetic field and so as to create a varying optical effect (arrows) in said impression.

Therefore it would be obvious to a person of ordinary skill in the art at the time of invention was made to have modified Weber's screen printing machine by using the optically variable ink as taught by Batzar et al. because the modification/combination would print a specially designed pattern for the purpose of making variety of printing production more efficiently and securer.

The modification/combination meets all the limitation of Claim 1.

With respect to Claim 6, the modification/combination also meets all the limitations of Claim 6 (column 4 lines 30 - 34 of Weber): the printing machine as claimed in claim 1, in which said magnetic element or elements (18a) create a magnetic field (magnetic lines in column 3 line 54) in a predetermined direction.

With respect to Claim 7, the modification/combination also meets all the limitations of Claim 13 (Fig. 4 of Batzar et al.): the pigments (10 and 10') are orientated in a direction parallel (10) and/or perpendicular (middle one of 10') to the direction (horizontal) of travel of the substrate (2).

With respect to Claim 11, the modification/combination also meets all the limitations of Claim 11 (see Fig. 2 and column 4 lines 26 – 34 of Weber): a method of screen-printing a substrate (33) in the form of a sheet or web, in which an impression is formed using an optically variable ink (as taught by Batzar et al.) containing pigments that can be oriented by a magnetic field, said impression being formed by passing said substrate (33) in contact with an impression cylinder (38) with which there collaborates at least one screen (1) of cylindrical or fiat shape equipped with a doctor blade (31) for screen-printing said optically variable ink (as taught by Batzar et al.), wherein said impression is subjected to a magnetic field before it dries so as to orientate said pigments and create a varying optical effect (arrows in Fig. 4 of Batzar et al.) in said screen-printed impression.

With respect to Claim 12, the modification/combination also meets all the limitations of Claim 11 (column 4 lines 30 -34 of Weber): the printing method as claimed in claim 11, in which the magnetic field orientates the pigments (taught by Batzar et al.) in a predetermined direction.

With respect to Claim 13, the modification/combination also meets all the limitations of Claim 13 (Fig. 4 of Batzar et al.): the pigments (10 and 10') are orientated in a direction parallel (10) and/or perpendicular (middle one of 10') to the direction (horizontal) of travel of the substrate (2).

With respect to Claim 20, the modification/combination also meets all the limitations of Claim 20 (column 4 lines 30 - 35 of Weber): the method as claimed in claim 11, wherein said magnetic field needed for orientating said pigments (taught by

Batzar et al.) is produced by means of a cylinder (38) bearing at least one magnetic element (40) on its surface.

5. Claims 2, 14 - 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber in view of Batzar et al. as applied to claims 1 and 11 above, and further in view of Pearce (Patent No.: US 4186944).

With respect to Claim 2, the combination discussed in Claim 1 teaches all the limitations of Claim 2 except the impressions arranged in the form of matrix.

However Pearce discloses in Fig. 2 and column 3 lines 19 - 24: the substrate (plate) receives a plurality of impressions arranged (column 3 line 19) in the form of a matrix (blocks ABCD column 3 line 20) and wherein the impression cylinder comprises a plurality of magnetic elements (electromagnet column 3 line 1) arranged (column 3 line 3) in a corresponding matrix form (blocks ABCD).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the printing machine from the combination of Weber and Batzar et al. by using the arrangement of a matrix form as taught by Pearce because the modification/combination would give a large area of highly finished surface for the purpose of making the printing products with better quality.

This modification/combination meets all the limitations of Claim 2.

With respect to Claim 14, the modification/combination also meets all the limitations of Claim 14 (see Fig. 4 and column 3 lines 58 – 62 of Pearce): the printing method as claimed claim 12, in which a first impression is formed on the substrate

(plate) using an ink with varying optical effect (taught by Batzar et al.), said impression is subjected to a first magnetic field (column 3 line 58) orientating the pigments (column 4 line 19 of) in a first direction (arrow 8), said first impression is dried (using drier in the ink in column 2 line 52), a second impression is formed on the first impression (those magnetic particles lying above as other particles being unchanged in column 4 lines 3 – 5) using an ink with varying optical effect (taught by Batzar et al.), said second impression is subjected to a second magnetic field orientating the pigments in a second direction (arrow 12), and said second impression is dried.

With respect to Claim 15, the modification/combination also meets all the limitations of Claim 15 (see Fig. 4 and column 3 lines 58 – 62 of Pearce): the method as claimed in claim 14, in which the first direction (arrow 8) and the second direction (arrow 12) are different.

With respect to Claim 16, the modification/combination also meets all the limitations of Claim 16: the method as claimed in claim 11, in which said impressions comprises a plurality of individual impressions (bars as shown in Fig. 2 of Pearce) arranged (column 3 line 19) in a matrix form (blocks ABCD)

With respect to Claim 21, the modification/combination also meets all the limitations of Claim 21 (column 3 lines 2 - 4 of Pearce): the method as claimed in claim 16, wherein a corresponding magnetic field is produced for each of said individual impressions.

6. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber in view of Batzar et al., and further in view of Ritzerfeld (Patent No.: US 3530794).

With respect to Claim 8, this combination meets all the limitations of Claim 8 except said at least one magnetic element is covered by a sheet of non-magnetic material.

However Ritzerfeld discloses in Fig. 10 and column 3 lines 10 -12: said at least one magnetic element (46) is covered by a sheet (1) of non-magnetic material.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the printing machine from the combination of Weber, Batzar et al. and Ritzerfeld by including the non-magnetic sheet to cover the magnetic element as taught again by Ritzerfeld because the modification/combination would give protection to the magnet without influence to the magnetic field for the purpose of making the printing products more effectively.

This modification/combination meets all the limitations of Claim 8.

With respect to Claim 19, this modification/combination meets all the limitations of Claim 19 for the same reason applied to Claim 8 above.

7. Claims 9 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber in view of Batzar et al. and Ritzerfeld, and further in view of Larios (Patent No.: US 5213042).

With respect to Claims 9 and 24, this combination applied in Claims 1 and 8 above meets all the limitations of Claims 9 and 24 except that said sheet is made of aluminum or of stainless steel...

However Larios discloses in column 5 lines 28 -31: non-magnetic materials including aluminum.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the printing machine from the combination of Weber, Batzar et al. and Ritzerfeld by including the non-magnetic sheet made of aluminum as taught by Larios because the modification/combination would give protection to the magnet without influence to the magnetic field for the purpose of making the printing products more effectively.

This modification/combination meets all the limitations of Claims 9 and 24.

8. Claims 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weber in view of Batzar et al. and Ritzerfeld, and further in view of Pearce.

With respect to Claim 18, the combination applied in Claim 8 above meets all the limitations of Claim 18 except a plurality of magnetic elements arranged in a matrix form.

However Pearce discloses in Fig. 2 and column 3 lines 19 - 24: the cylinder comprises a plurality of magnetic elements (electromagnet column 3 line 1) arranged (column 3 line 3) in a corresponding matrix form (blocks ABCD).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the printing machine from the combination of Weber, Batzar et al. and Ritzerfeld by using the arrangement of a matrix form as taught by Pearce because the modification/combination would give a large area of highly finished surface for the purpose of making the printing products with better quality.

This modification/combination meets all the limitations of Claim 18.

Allowable Subject Matter

9. The following is a statement of reasons for the indication of allowable subject matter:

With respect to Claim 3, it is considered allowable primarily because the prior art of record does not teach the limitation of "the unloading system comprises a cylinder having at least one magnetic element on its surface" in combine with the rest of the limitations recited in the claim.

With respect to Claims 4 – 5, 22- 23 and 25 -26, these claims are allowable because they depend from Claim 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuan L. Chen whose telephone number is 571-270-

3799. The examiner can normally be reached on Monday-Friday 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

yc
September 30, 2008

/Daniel J. Colilla/
Primary Examiner
Art Unit 2854